

Lower Back Pain



Life-Line Free Report

by Dmitri N. Artemov, MD, PhD

Dear Reader,

or should I really say 'Fellow Sufferer'?

This report is an answer to literally hundreds upon hundreds of burning questions so many people on-line ask every day and every night on most health forums dedicated to Her Majesty Lower Back Pain and everything around it - how to choose your therapist, what the heck is wrong with me, why everyone I consult is telling me a different thing, how come at the age of around 20 people routinely have up to FOUR disc surgeries and why almost no one is really questioning where is the end of it, how do I get rid of this excruciating pain day in and day out or is there ANY way to relieve it? One choice is really no choice at all. Why surgery always comes as necessary step in LBP patient's care? Is there really any other choice?

If this looks like You then your questions have been answered.

This report does not claim to be a definitive guide to LBP (that is yet to come hopefully in about a month's time) but rather a quick 'let you know' that there is light at the end of seemingly endless tunnel for thousands upon thousands lower back sufferers out there. It is an attempt to point You in the right direction, give You an outline, a perspective of what is to be expected and what can You actively do about it. Mind if told You that the reality of improving your LBP is in fact a lot less dramatic than it has been presented to You and it is also a lot more complicated than a simple painkiller patch.

That said, I sincerely hope to make this short report useful. Hope to make a difference.

To your health,

Dmitri Artemov

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About me

I am a Cyprus-based medical practitioner maintaining a private practice since 1991.

I have been engaged in treating Lower Back Pain non-surgically for about twenty years, give or take a year.

Admittedly in all these years I did send a few people (six altogether) to the operating theater or, more to the point, referred them to a neurosurgeon, which is not exactly the same.

A little statistics will clarify my point in a moment.

- All SIX patients were referred to a neurosurgeon within the first three years of my practice*
- THREE of them has never made it even to the neurosurgeon's consultation room let alone the operating theater, they simply got lost on the way there*
- All three of them within weeks or months reported an improvement with symptoms regressing considerably or disappearing altogether after activities presumably 'incompatible' with their condition – scuba diving, intense swimming, serious RESISTANCE training*

So, year after year the body of evidence not fitting into the world appearing to be comfortably divided between views of chiropractors and neurosurgeons grew in bulk, the very first quite serious case of spondylolisthesis appearing in my examination room as early as 1993. A 19 year old National Guard soldier who experienced so much pain that he literally fell onto the ground, while keeping watch. In spite of the fact that the sheer volume of X-ray evidence he brought with him from England where he used to reside before moving to Cyprus with his parents was so overwhelming it was physically hard to lift, he was still required to serve.

To my amazement a few treatments aimed at relaxing his considerable muscle spasm and months of intensive swimming brought about the improvement that lasts to this day. Need I say he was reluctant to have the fusion he had been advised to have by the Military orthopedic surgeons?

The 'critical mass' of evidence has been achieved in mid-90s when a bodybuilder in his thirties who presented with an X-Ray picture of high degree spondylolysis/spondylolisthesis requested my consultation. An exam indicated a marked muscular spasm in the lower back more to one side, piriformis syndrome, pain and paresthesiae in the leg with signs of beginning atrophy. In spite of all that he strongly objected to surgical treatment.

After a routine MRI exam, and largely ineffective treatment consisting of laser scan, laser acupuncture, massage aimed at relieving the pain I suggested to him swimming with flippers on.

A follow-up in six months revealed total regress of symptoms and normal muscle mass in previously atrophic leg.

I tried to interview him and he confessed that he did not just take my advice he actually exceeded it by adding resistance training to his daily routine out of pure desperation in lieu of imminent surgery.

He has not seen a surgeon to this day.

A search for answers led me through a series of nearly mystical 'accidents' to Moscow, Russia to my, then unfamiliar, would-be PhD mentor and life-time friend Dr. Sergei M. Bubnovski, MD, PhD.

The ideas he propagated have stricken more than one chord in my system of perception of health and disease and responsibility to the ones in need of impartial medical advice. Another person who helped shape my current abilities, skills and views as my PhD mentor is a prominent Pediatrician, Doctor of Sciences, Academician Alexander G. Rumiantsev, a man of encyclopedic knowledge and a generous heart. I do owe them a debt of gratitude I could not possibly overestimate.

The end result of all of the above is a different medical mentality I inherited and which I now try to share with as many people who need our help as is humanly possible.

Billion Dollar Business

*All truth passes through three stages:
First it is ridiculed.
Second, it is violently opposed.
Third, it is accepted as being self-evident”
A. Schopenhauer*

An estimated 80% -100% of industrial countries population at some stage in life are bound to have a Lower Back Pain (LBP).

With years this statistics does not seem to improve. Largely sedentary urban population seems to develop LBP at an alarmingly rapid pace.

The economic consequences of the present state of affairs as well as their implications are huge. For example a study of LBP costs in Australian adults is pretty indicative of all, "...it estimates the direct cost of LBP in 2001 to be AU dollars 1.02 billion. Approximately 71% of this amount is for treatment by chiropractors, general practitioners, massage therapists, physiotherapists and acupuncturists. However, the direct costs are minor compared to the indirect costs of AU dollars 8.15 billion giving a total cost of AU dollars 9.17 billion. LBP in Australian adults represents a massive health problem with a significant economic burden. This burden is so great that it has compelling and urgent ramifications for health policy, planning and research. This study identifies that research should concentrate on both direct but particularly the indirect costs including cost-effective management regimes that encourage an early return to duties". [2]

Another study confesses, "it was found that the cost of LBP illness was high and was comparable to other disorders such as headache, heart disease, depression or diabetes A small percentage of patients with chronic LBP accounts for a large fraction of the costs. Excessive and inappropriate use of diagnostic or therapeutic services can be documented... management according to evidence-based guidelines was not necessarily economically attractive. Interventions for acute or chronic LBP failed to show economic benefits, but demonstrated modest clinical benefits, which suggested a weak relationship between clinical and economic outcomes". [24]

"In more than 80% of these patients no objective pathologic cause can be found and in most the disorder The seemingly endless list of similar studies could go on forever. One thing is beyond a shadow of a doubt. LBP is a billion dollar business and as such requires careful consideration and analysis which is quite

beyond the scope of this free report. I hope to take all this a trifle further, literally within a month in my coming eBook "Lower Back Pain Inside & Out" which I intend to make a thorough expanded version of this Free Report, its superset so to speak.

Ministry of Health as opposed to Ministry of Disease

'Administering medicine to diseases that are already established and treating conditions that are already out of control is like starting to dig a well after you're already dying of thirst, or raising an army after you've already been invaded by the enemy.'

Neijing Classic of Internal Medicine

A current state of affairs in most industrially developed countries lives a thinking responsible individual no other choice but wonder how exactly their corresponding Ministries of Health position themselves in respect of the patients and disease.

It probably would not be much of an overstatement to call those "Ministries of Disease" due to their disease-oriented, disease-centered nature.

Ancient China set an example when the Emperor's physician has been paid ONLY on the days when the Emperor enjoyed excellent health.

Now, don't get me wrong, being a physician myself I do realize it is really impossible and probably quite unnecessary to implement these days, but it demonstrates the once-upon-a-time measure of responsibility.

The present disease-centered organization of medical care (as concerns LBP) anywhere in the world depicts a sad picture of problems-ridden, burden-laden, less efficient and quite unlikely to change any time soon monstrosity.

With technological advances and massive financial injections it forgets why it is here in the first place and seems to "Throw The Baby out with the Bath Water". In later chapters I will develop this into a structured idea. For now let me just state that the present state seems to suit most 'other side of the fence' participants of the LBP 'game' for the lack of a better term.

Causes of LBP

The causes of LBP have been the subject of great controversy and disagreement among the professionals. There are quite a few recognized causes of LBP. For the purpose of this report we should take a closer look at Myofascial Syndrome in LB and at the Degenerative Disc Disease (DDD), by far the most

frequently cited culprits, the usual suspects in LBP, the condition bringing about the most surgical activities with the most far-reaching consequences and implications.

Short PathoPhysiology of LBP

Lumbar intervertebral disc is located between two vertebral bodies.

The disc consists of three distinct parts - centrally-located nucleus pulposus, a circular structure that contains it - annulus fibrosus and vertebral endplates below and above it, thin cartilages separating the disc from both vertebral bodies.

All parts have different structure and biochemical content of three basic components proteins in the form of proteoglycans, cartilage in the form of collagen and water which amounts to as much as 90% of disc volume. Annulus fibrosus as the name implies has a high fiber content. It is a highly organized, hard, dense layered structure.

Constant axonal loads during the daytime and rest at night are responsible for diurnal disc height fluctuations amounting to about a couple of inches of overall height.

The discs comprise the most extensive largely avascular structure of the organism, i.e. they have got NO significant blood vessels to supply them. As such they have to rely on different mechanisms of water and oxygen transport - mainly diffusion through the endplates.

The most important, highly underrated or even often overlooked mechanism of water/oxygen transport is the pump action provided by the [deeper] skeletal muscular layers on alternate contraction-relaxation. Prolonged static loads, awkward postures, sedentary lifestyle, injuries to the lumbar region, LACK of exercise bring about persistent muscular spasm effectively cutting off water/oxygen supply to the disc. Blood flow through spastic muscles is thus greatly diminished negatively affecting the last available channel of water supply - the blood vessels in the utmost outer parts of annulus and finer microcirculatory bed adjacent to the outer (in respect to disc) surfaces of the endplates. It has also been demonstrated that an injury to disc causes rapid lumbar muscles' atrophy further negatively affecting an already ailing blood supply.

There is experimental animal data to support that [32].

The vicious circle is thus becoming complete. More muscular spasm – the less nutrients to the disc, the more pronounced are the degenerative (dystrophic) changes in the disc. The more damage to the disc – the less likely the normal functional state of the muscles is and the more their atrophy is marked.

[Age and non age-related factors in disc herniation appearance](#)

There is a significant correlation between the age and degree of disc degeneration.

Norbert Boos, MD, et al. in 1997 presented the first study in which age-related changes are correlated on a macroscopic, histological, and molecular level using complete sections of lumbar motion segments. They reconfirm the notion that disc degeneration starts as early as in the second decade of life. Therefore, only early prevention of disc damage may inhibit disc degeneration and its sequelae.

Further in 2002 they described "...The new study offers a major clinical observation, one that previous studies had hinted at. Disc degeneration typically begins early in life. Many imagine that the lumbar disc remains pristine and unblemished until the ravages of middle age. But this is not the case. The disc degeneration that is so obvious by middle age appears to be the culmination of a long sequence of degenerative changes that begins in adolescence." Further on blood supply and tissue breakdown "...diminished blood supply to the intervertebral disc in the [first half of the second decade of life](#) appears to initiate tissue breakdown", "... the diminished blood supply and the extent of structural alterations early in life present a significant challenge for any tissue engineering and repair of the disc".[10],[31]

Another 2002 quote '...As expected, the discs of fetuses and infants had an ample blood supply, with vessels crossing the endplate and extending into the outer and inner annulus fibrosus.

In normal adult disc tissue they found no vessel invasion of the end-plate and only a modest web of vessels in the outer zone of the annulus fibrosus...' [29]

And yet, there is substantial evidence to support the idea that the disc degeneration can take place in any age provided there is blood supply impairment deep enough to precipitate the process. [Spasm of deeper layers of lower back muscles effectively cut off the above-mentioned blood circulation thus facilitating disc degeneration.](#)

[Her Majesty Lower Back Pain](#)

Most of the people coming into my consultation room (roughly in excess of 90%) have deeply **detrained** muscles of the back, visible imbalances of muscular mass development, multiple myofascial trigger points, some of them with sciatica-like pain which on a closer palpatory examination looks like a short hamstrings syndrome, atrophic hamstrings and/or gluteal and calf muscles.

The ubiquitously used Lasegue sign (universally considered 100% proof of sciatica) in fact provide so little specificity in diagnosing it [sciatica] that in eliciting this sign ALL of the following structures are tensed - muscles, fasciae, tendons, ligaments of posterior hip, gluteal and lumbar region, and of course TO A LOT LESSER DEGREE sciatic nerve which in fact anatomically allows for greater elasticity due to the winding course its fibers take.

To quote one of the most respected US Strength and Conditioning Specialists Steve Cotter of www.fullcontact.com fame:

"...I work regularly in my physical training seminars with people who spend much of their time sitting at a desk, for extended periods of time. It is common to see postural defects in these people brought upon by months and years of inactivity. The most common defects manifest as rounded lower backs and excessively tight hamstrings.

I have found that attempting to elongate these muscles through traditional stretching methods is not often effective for these people. Instead, bringing them through full ranges of motion and strengthening the opposing muscle groups work more effectively to restore the body to balance.

For example, strengthening the abdominal group and elongating the hip flexors have the effect of bringing the lower back musculature to a state of normal function again.

The body works as a functional unit and it through movements that train the body as a whole system that brings about natural health and function..."

Being a controversial subject as it is in every LBP patient there still are a few common major concerns to be addressed:

- 'Irrefutable' MRI findings of disc damage and nerve compression
- Patient's nearly unshakable belief that from now on surgery is the only option
- Ineffective previous pharmacological and other forms of treatment
- Psycho-social factors: usually heavy smoking and sedentary life style
- History of [sometimes multiple] previous surgery

It is extremely difficult at times to deal with people *exhausted, tired* of sleepless nights, nearly constant pain, inability to attend to their businesses or care for the kids and families.

Now it seems the right time to have a look at what yet another study concludes '*Structural abnormalities demonstrated by imaging studies should therefore only be interpreted in the light of the clinical findings. This review shows that only a few studies contribute to our understanding of the clinical efficacy of imaging studies in the evaluation of low back pain disorders*'. [30]

Every medical student at some point is told or shown examples of cases when no clinical abnormalities could be found or elicited in the presence of irrefutable imaging or instrumental findings. Many people for example, do not even suspect having only one kidney in the total absence of clinical signs. If the existing organ well compensates for the other absent paired organ, often times the medical professionals become aware of it when stumble on it looking for some other pathology or even as a post-mortem finding.

Sometimes, the gap between the clinical findings (or rather the scarcity of ones) and imaging findings is so huge that had the patient even a tiny complaint, just by looking at the X-rays or MRI one might be tempted to explain all the patient's troubles with these particular findings. That is not always the case.

Tremendous degenerative changes sometimes yield very little or NO symptoms. To be fair and consistent the reverse is also true.

Case Study:

A patient C.A. 43 year old white male complains on an intense pain down the Rt leg and ankle.

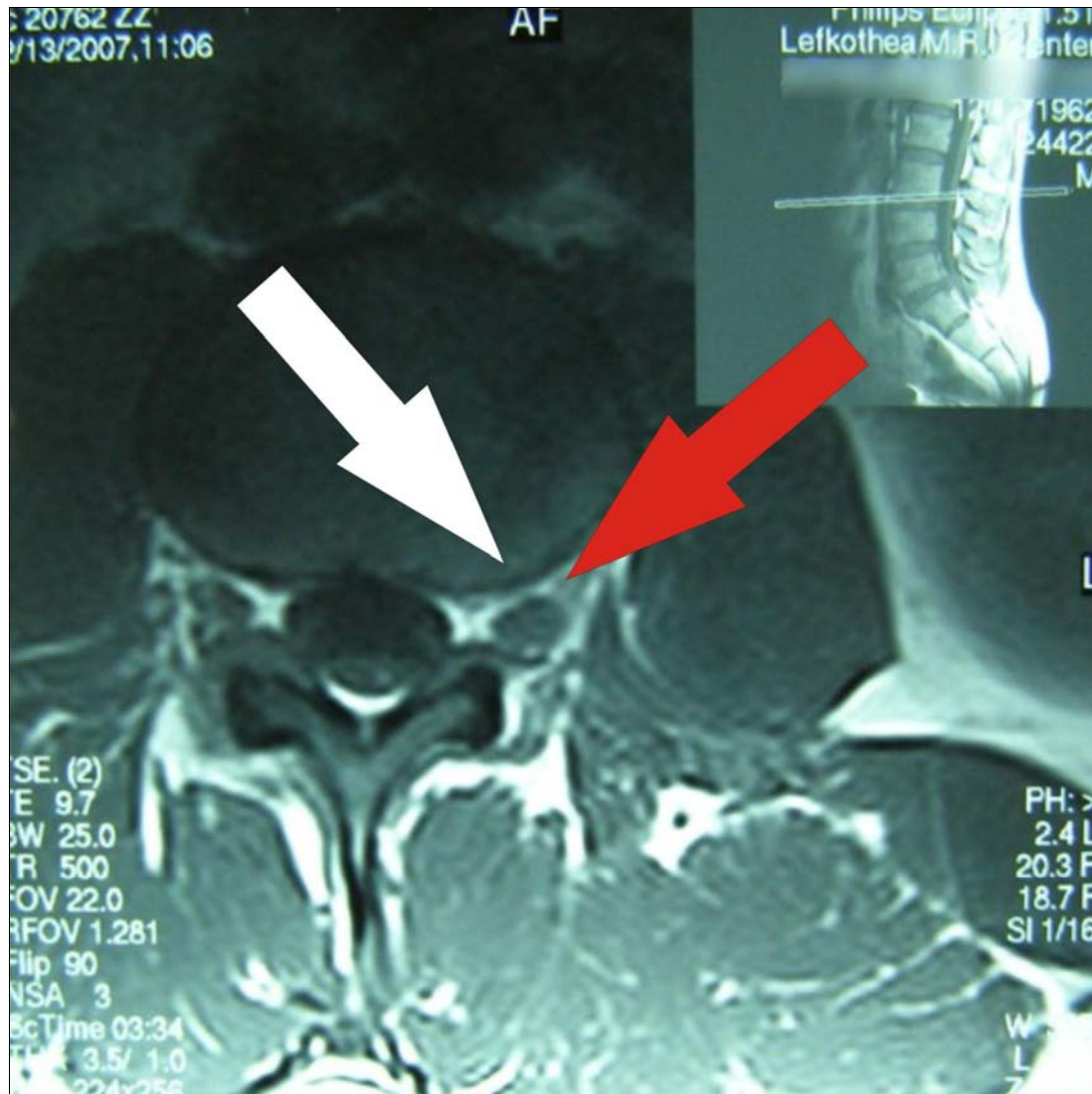
Heavy smoker.

On Examination: Marked myofascial syndrome, muscular spasm LB more left. Atrophic Rt gluteal and thigh muscles. Functionally Short Hamstrings Syndrome (positive Lasegue sign). Palpation of pelvic ligaments painful Rt>Lt. Piriformis syndrome. In a sit up position having difficulty reaching for his toes when his knees are passively straightened. And in contrast with that freely reaches for his toes when the knees are even slightly bent.

To give you an example here are a few MRI images that demonstrate my point.

Following are three consecutive slices of the same disc L3-L4. Notice the extension of the disc herniation and the degree of thecal sac and nerve involvement. Clinically it does not cause ANY pain. It does cause some motor deficit though.

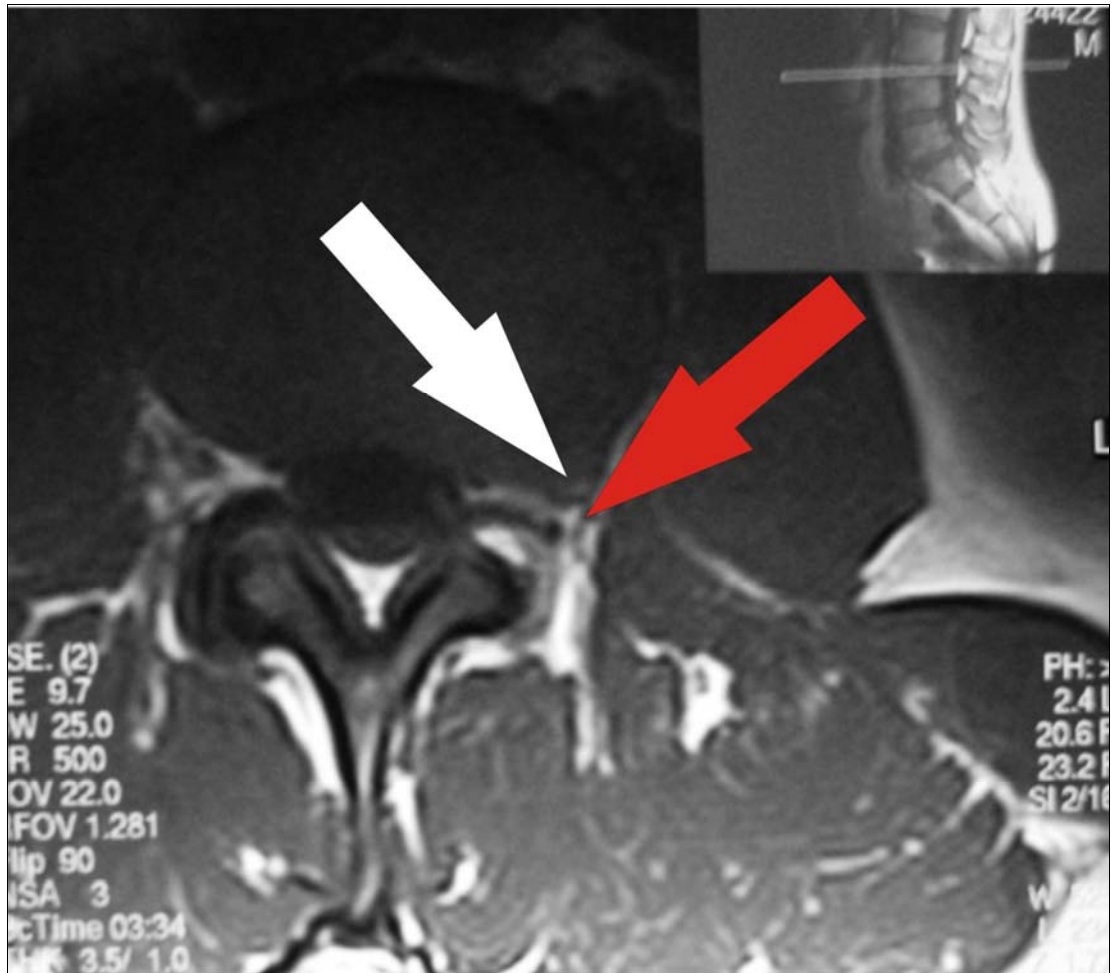
Later it will be compared to another level, this time L5-S1 disc herniation that is the cause of intense pain radiating down the right leg and ankle. Note the degree of herniation and the structures involved.



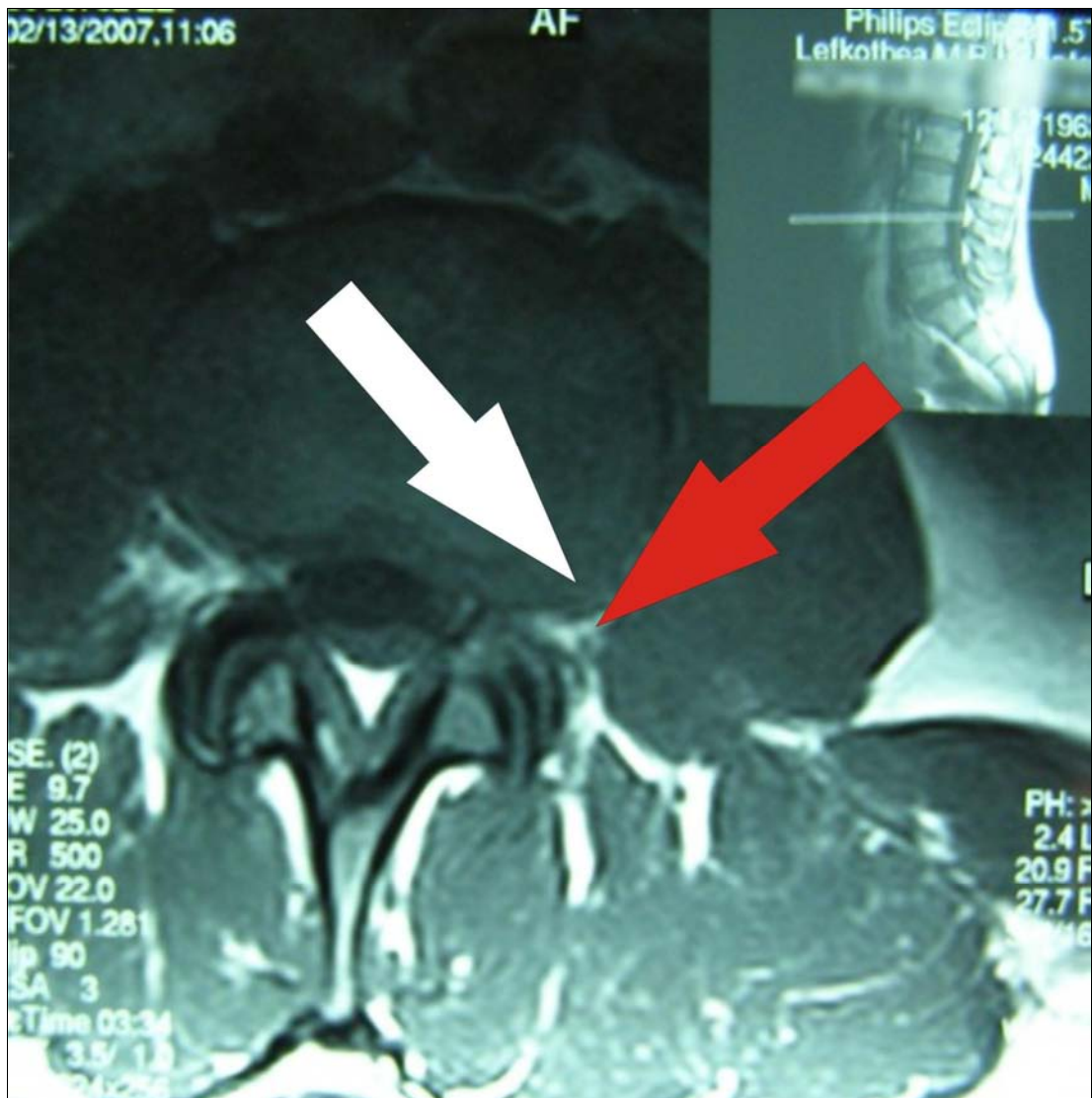
White arrow shows the bulging area of the disc. Red arrow shows the traversing nerve rootlet according to common standard practice of interpreting MRI findings in LBP.

According to that practice there should be significant pain syndrome on the LEFT SIDE of LB and leg. In fact there is NO pain, no irradiation whatsoever.

Why these findings literally startle most practitioners and why it can be perfectly explained by anatomical interrelations in between the structures involved in LBP would be addressed in a lot greater detail in my e-Book “Lower Back Pain Inside & Out”.

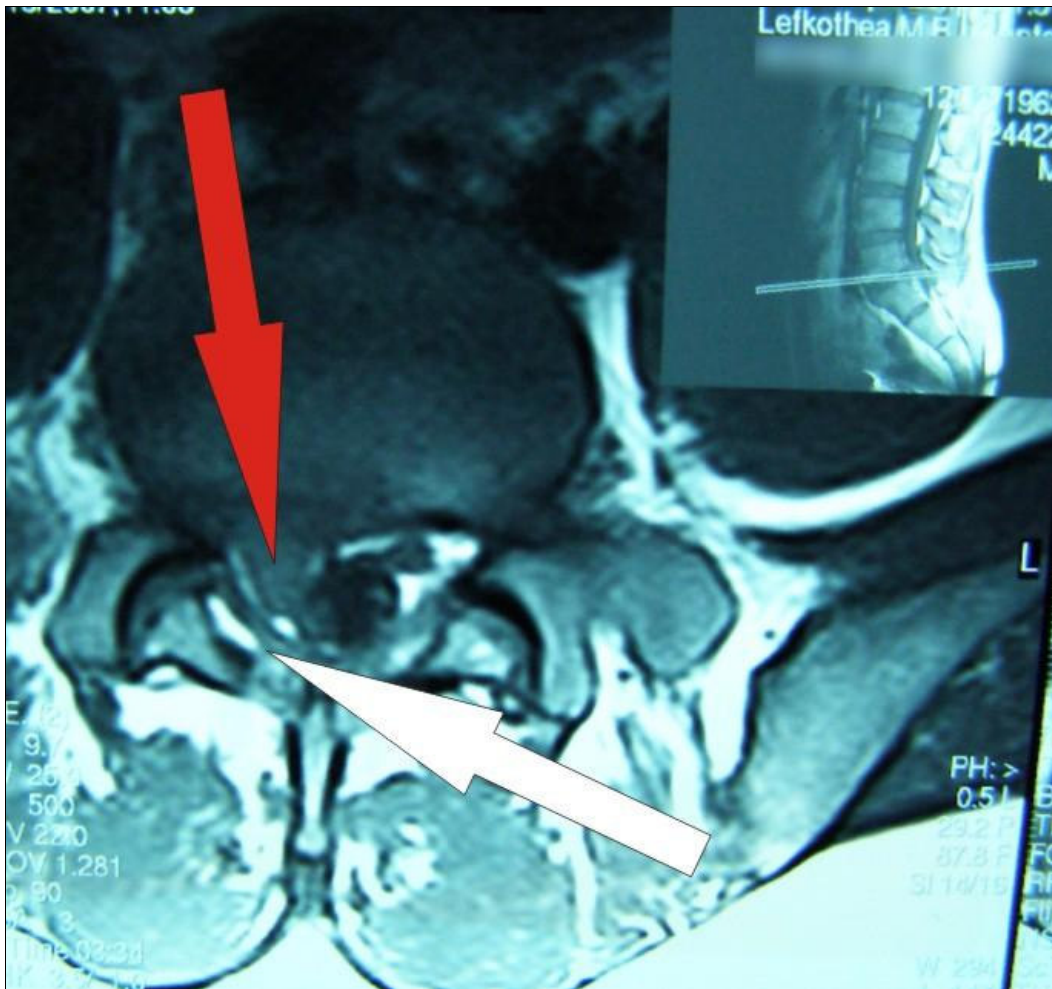


Note the bulging area of the disc protrude farther obviously occupying more space. If there was even a tiny piece of clinical evidence (in terms of PAIN) from the left side of the LB, no doubt it would be readily interpreted as a result of the disc protrusion. The fact that there are NO clinical symptoms (PAIN) to mention does not fit into somewhat fossilized conceptions of LBP.



The third consecutive slice of L3-L4, even bigger protrusion. Yet no pain? See comments above.

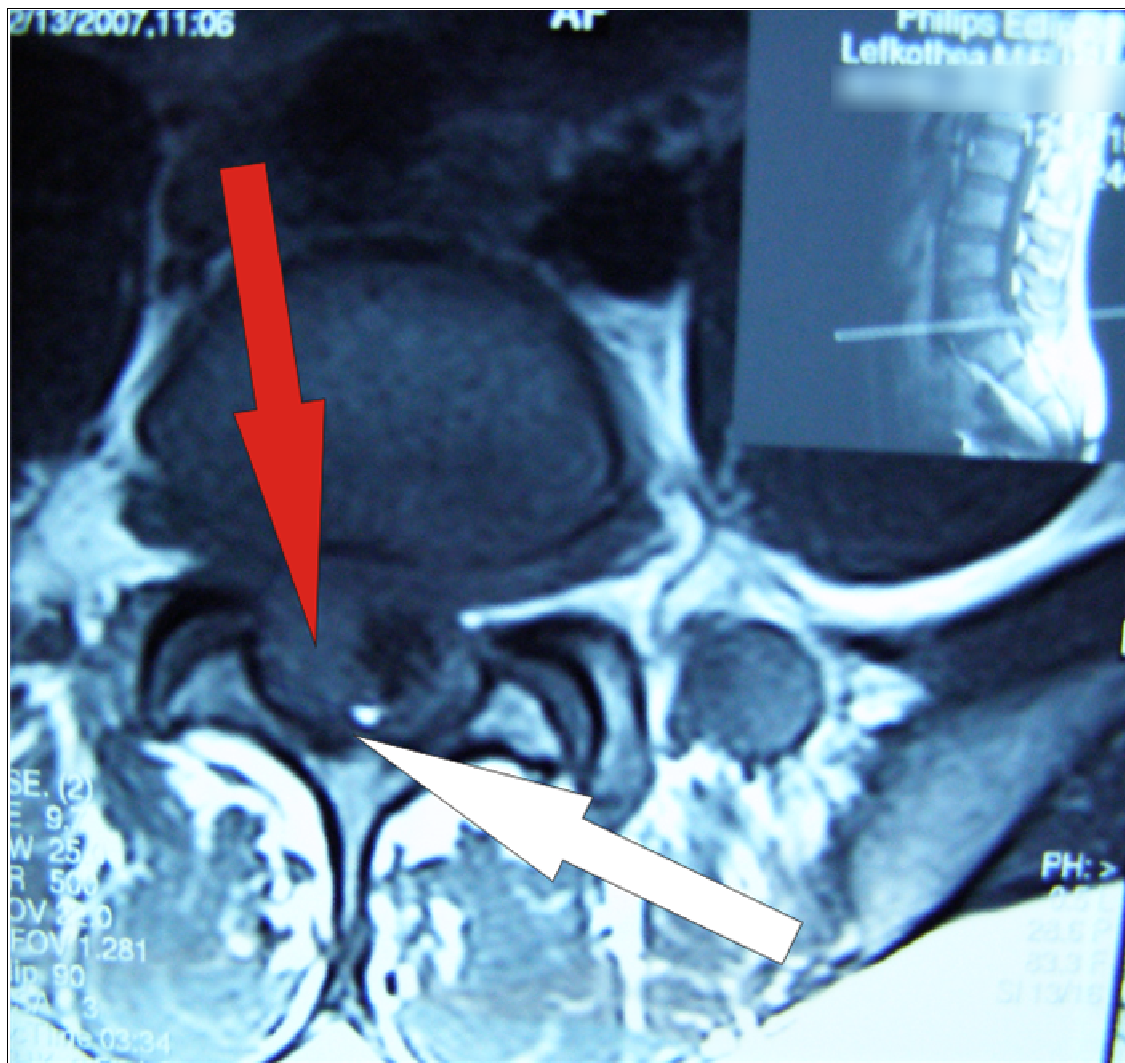
The following are two slices of the L5 - S1 disc. Note the degree of disc prolapse. Incidentally it is about the only level where nerve compression is anatomically possible and only under certain conditions at that.



L5-S1 disc. A bigger protrusion this time. Note the disc-nerve interrelationship. Red arrow – disc prolapse, white arrow- nerve compromise according to common standard MRI interpretation.

In fact, disc herniation as means of mechanical compression of neighboring nerve rarely if ever is the cause of lower back pain. What is a lot more likely is motor deficit. . In the very long chain of pathological developments in the LB the disc is clearly on the receiving end.

Dystrophic changes in the disc start in adolescence in contrast with the time of onset of majority of debilitating lower back problems. In this particular case the disc changes are accompanied by a marked myofascial syndrome in the lower back. It seems largely responsible for the sciatica.



The last of the two slices I have picked up for demonstration.

Next slice of the same L5-S1. Protrusion gets farther.

Following is the last demonstration slide – lateral view of thoraco-lumbar spine.

Same patient.



Three arrows - the last lumbar discs – note their LOWER than in higher level discs water content as the effect of akinesia, repeated strains, static loads, chronic muscular spasm, heavy smoking and as a result - bad disc nutrition, inevitable (in this particular setup) discs' dehydration, loss of elasticity, easier injuries, prolapse. Note some loss of normal lumbar lordosis – a sign in keeping with chronic muscular spasm.

One arrow – the area of the disc protrusion, note the thecal sac involvement.

Disc surgery Epidemiology. Europe vs US

'A delusion does not cease being one just because it has been shared by the majority'

Leo Tolstoy

The Law of Coercion and The Law Of Love

'The incidence for degenerative intervertebral disk surgery in Germany is about 87 operations per 100,000 inhabitants and year. There is no significant increase in the last five years, but there is a tendency to more outpatient disk surgery. Presently 16% of disk surgery is done as an outpatient procedure. Comparing with other European countries there are similar frequencies of disk surgery, contradictory in the United States there was a huge increase of the incidence for disk surgery since 1980.

'Lumbar fusion rates have increased dramatically during the 1980s and even more so in the 1990s. The most rapid increase appeared to follow the approval of a new surgical implant device..., 8-fold variation in regional rates of lumbar discectomy and laminectomy in 2002 and 2003'. [24]

'In the case of lumbar fusion, there was nearly a 20-fold range in rates among Medicare enrollees in 2002 and 2003. This represents the largest coefficient of variation seen with any surgical procedure. Medicare spending for inpatient back surgery more than doubled over the decade. Spending for lumbar fusion increased more than 500%, from 75 million dollars to 482 million dollars. In 1992, lumbar fusion represented 14% of total spending for back surgery; by 2003, lumbar fusion accounted for 47% of spending...'.[33]

To sum it up it is safe to say that the alarming trend of more coercive solutions for lower back pain doesn't seem to decline. On the contrary, it keeps climbing. Do I really need to say that it would not really be long before most of the population would be suffering from the same solution to their lower back problems?

[Is there light in the end of the tunnel?](#)

The answer is definite yes, there is.

A study I would call elegant, by Finnish researchers show a lot of promise. It demonstrates the importance of pro-inflammatory action of TNF- α in disc rupture and in sciatica.

The fact that the disc content was never intended by nature to go outside the annulus fibrosus explains the immunological response when this happens.

Objective of the study was: 'To evaluate the efficacy and safety of infliximab, a monoclonal chimeric antibody, against tumor necrosis factor-alpha (TNF- α) [for the treatment of severe sciatica](#)...

...Evidence from animal studies indicates that TNF- α plays a role in the pathophysiology of sciatica.

10 patients with disc herniation-induced severe sciatica received infliximab (Remicade 3 mg/kg) intravenously over 2 hours. The outcome was assessed at 1 hour, 1 week, 2 weeks, 1 month, and 3 months after the infusion and compared to historical control subjects consisting of 62 patients who received saline in a trial of periradicular infiltration for sciatica. Leg pain was the primary outcome, with more than a 75% decrease from the baseline score constituting a painless state.

[At 1 hour after the infusion, leg pain had decreased by 50%.](#) At 2 weeks, 60% of the patients in the infliximab group [were painless](#), as compared with 16% of the control patients ($P = 0.006$). The difference was sustained at 3 months (90% vs 46%; $P = 0.014$). ... At 1 month, every patient in the infliximab group had returned to work, whereas 38% of the control subjects still were on sick leave ($P = 0.02$). [None](#) of the patients treated with infliximab [underwent surgery](#) during the follow-up period. No immediate or delayed adverse drug reactions and no adverse effects related to medication were observed.

To conclude the reasoning behind all this I would like to mention one more study showing theoretical backup for what physicians using kinesiology and kinesiotherapy in their daily practice already knew from long ago. The herniated disc is perfectly able to get resorbed, i.e. get dissolved.

What can actually help do it?

Dr. Sergei M. Bubnovski has developed and patented his own special kinesiotherapy system to deal with that problem.

The core of the system is a set of special exercises aimed at decompression of the spine and elimination of chronic muscular spasm in lower back. Creation of a functionally capable muscular corset and providing better nutrition to the spine and its discs, significantly improving their water content and activating a powerful natural defensive herniated disc resorption mechanism thus eliminating the need for surgery.

In other words, the system creates necessary conditions for the body to heal itself.

Very slightly rephrasing Dr. Bubnovski I might [translating the original] say 'Correct movement heals, incorrect movement kills', the original meaning is 100% preserved.

The cases needing the surgery are relatively rare. And include mostly cauda equina lesions when the patients had to be operated on urgently due to imminent paralysis of the lower limbs.

Interesting statistics Bubnovski Kinesiotherapy Center provides show the success rate of 95 - 96%.

Walking the talk on a daily basis since 1999 I could attest to that and the efficacy of the method.

Hope this report has been enlightening enough for those who suffer from lower back pain, or even has been operated on. Life doesn't stop here for you, and your health is very much in your hands to this day. All it takes is a decision and determination to press forward when you don't feel like it, when you are feeling down and don't believe there could be an improvement for you.

There is nothing impossible in lower back pain. I have been doing it for too long to know that for sure. Improvement is around the corner. If you are persistent enough and you're guided by someone who knows his way around your back. The results will be there!

I would like to wrap it up with a passage from one of the best motivational speakers I came across in my life T. Harv Eker. I like him so much that I will quote the passage in full:

*'We live in at least four different realms at once. These four quadrants are the physical world, the mental world, the emotional world and the spiritual world. What most people never realize is that the physical realm is merely a "printout" of the other three. For example, let's suppose you've just written a letter on your computer. You hit the print key and the letter comes out of your printer. You look at your hard copy, and lo and behold, you find a typo. So you take out your trusty eraser and rub out the typo. Then you hit print again and out comes the same typo. Oh my gosh, how could this be? You just erased it! So this time you get a bigger eraser and you rub even harder and longer. You even study a three-hundred-page manual called Effective Erasing. Now you've got all the "tools" and knowledge you need. You're ready. You hit print and there it is again! "No way!" you cry out, stunned in amazement. "How could this be? What's going on here? Am I in the twilight zone?" What's going on here is that the real problem cannot be changed in the "printout," the physical world; it can only be changed in the "program," the mental, emotional, and spiritual worlds. Money is a result, wealth is a result, **health is a result, illness is a result, your weight is a result. We live in a world of cause and effect**'.*

As for the rising number of spinal surgeries in the United States, (and to lesser extent) all over the world I might say just one thing, trying to cure the spine by way of immobilizing it is exactly the same as trying to erase the error in the **printout** of all your previous life. You should really change the cause - your lifestyle, kinematic patterns, reeducate your body, change your mentality and change your perception of the things around you in relation to yourself to really start being healthy.

There is nothing impossible, if you decide to do that.

Detailed reasoning and description of particular techniques used in kinesiotherapy of lower back pain and disc herniation is the scope of a different, somewhat more in-depth book I intend to have written within a month. If you like this report and you like my style and believe that I know what I'm talking about You could subscribe to my mailing list to be notified when the book is ready to be published. Please do not forget to let me know what your most burning question is if you want me to answer that in my book.

Questions & Answers:

These questions are taken directly from lower back forums I have visited for the last few months. I was so overwhelmed to find out how many people do suffer from lower back pain, who cannot find any answers to their really burning questions. Since it was impossible to answer to everyone individually I decided write this report and include some of the questions and answers here.

(Spelling is left intact, just as I found it)

Question:

I started suffering from back pain 2 years ago. We are still in the zone of trying to figure out what is causing it. I thought it was sciatica, the doc said lumbago, another one said herniated discs, yet another said scoliosis. Who knows? All I am sure about is that it hurts all the time.

Answer:

An exam by experienced kinesiologist will definitely show you weakest points and the ways to take steps to balance those. If you have been having muscular spasms and imbalances for quite a long time it is quite possible that the disc has started suffering. In other words, it started losing water. If the low back muscles are weak, they might have started delegating their responsibilities further down the chain of command. In other words ligaments. Lower back anatomy is so organized that some of the muscles originate not only from the bone but also from the ligaments. Some of them literally pull them apart. That is why myofascial component of that pain should not be discarded. In any case, the exam is the single most important part in decision making.

Question:

I seem to have developed Cauda Equina Syndrome after the spinal block which I was persuaded to have for the 2nd hip replacement (instead of the usual general anaesthetic) and the general opinion is that nerve damage occurred during the hip surgery because of the block. I hope this will help you in some small way if you do decide to go ahead with surgery. I wish you well and am sorry I can't think straight tonight to give you more helpful advice than to warn you of what happened to me. I am still in severe constant pain in my lumbar spine from disc degeneration (which I believe can be caused by the chemicals

used in epidurals or spinal blocks) which causes nerve root compression and terrible sciatica in my right leg too. I have been taking so much in the way of pain medication and it only takes the edge off it...I am only out of pain lying down on my side with a pillow between my knees and only if I stay stock still. I have a neurogenic bladder (have a Mitroffanof urinary diversion) and neurogenic bowel...no sensation or normal function sexually either.

Answer:

Disc degeneration are actually very advanced stage consequences of chronic muscular spasm in the lower back. Nerve compression, if anything would cause motor deficit first. That pillow in between the knees is what keeps lumbar fascia from tension. Ice pack and core stabilization exercises would do you good. Ice pack would improve microcirculation and exercises would take tension away and strengthened the muscles. It would be beneficial. Core exercises could be done in bed. Akinesia would definitely not make things better.

Question:

Today some of the confusion was lifted when I received the results of a recent MRI, the results of which point to posterior annular fissure between L4 and L5. It seems to me that this condition is not as serious as those many of you suffer from, and it seems not as serious as the disk herniations so many I know seem to have recovered from by dint of exercise alone, a fact that gives me hope. I have not, actually, been terribly concerned about my condition since a bone scan demonstrated conclusively that I am not suffering from metastatic disease. Still, I do find that enduring ten months of nearly constant pain has begun to wear on me. I have been getting by with ibuprofen alone, but I am concerned about the toll a steady diet of this drug—and, of course, continuing pain—is taking on my body. I am concerned about having more surgery, and I am also concerned about chemical intervention.

Answer:

There are studies suggesting that the disk herniations with following nerve compression are not so much the cause of the lower back pain but the chemicals released from the disc. Tumor necrosing factor alpha is one of the most pro- inflammatory substances.

Question:

It's more like the muscles in my thoracic region down to my lower back have spasmed to the point that I can't even sleep unless I ice it down before bed-and even then the spasms will return within 2-3 hours and wake me up.

Answer:

Hi, that makes perfect sense! Let me explain. You seem accidentally to have stumbled upon the ONLY resonable relief - namely ANTI-INFLAMMATORY treatment. Incidentally it improves microcirculation quite a bit too - and that is a vast vascular bed responsible for tissue breathing.

Tumor, rubor, dolor, calor et functio laesa are CLASSIC signs of inflammation - swelling, redness, PAIN, HEAT, impaired function.

Frankly my eyes pop out when I read about hot wraps for the treatment of your kind of pain...

Question:

I am having a chronic low back pain for the past 1.5 years.

Incident No. 1 :

It all started in Nov. 2005 when one fine morning, i got up and lifted my cricket bat and practised a shot which involved forward bending, and the moment i did it, i felt thunders on my lower back and i collapsed. I tried getting up for the next 30 minutes but kept falling down. after this i was diagnosed for L3-L4 disc bulge, was on continuous traction, physiotherapy and completely recovered.

Incident No. 2:

I was doing all normal activities including driving till July 2006, when the next incident occurred. I went to an amusement park's virtual reality theatre, where they showed a train passing through the mountain and distorted the chair accordingly. i came out and was carried in the ambulance and once again every routines followed. diagnosed for the same complaint, but till now i have not recovered.

Treatments: 20 sessions of chiropractic, more than 35 sessions of physiotherapy, epidural steroid injects, acupuncture (traditional), laser acupuncture

Current condition: Not able to walk, sever pain on the left lower back. Please advise is this high time should i look at surgery? Any valuable advice is highly appreciated.

Answer:

Hi, Ram,

From the look of it your inability to walk stems from imbalances in the lower back muscular corset (girdle).

According to the description You have been diagnosed with L3-4 disc bulging.

No wonder you have very little to gain from of your current course of treatment. It looks like a severe muscular spasm to me and as such it would be unwise to look for surgery while your deeper layers of lower back muscles virtually cut off microcirculation in the area causing the current state of affairs. As for the disc, it is anatomically an avascular structure and as such could only get oxygen and WATER from the intimately closely located muscles that normally contract-relax. This muscular pump [or lack of herein] appears responsible for the segmental nerve root edema which in turn is followed by the whole sequence of inflammatory reactions.

I would suggest You see a good kinesiologist and/or exercise specialist. That will do you a world of good.

Question:

I have 3 herniated disks between L3 to S1. I also have degenerative disk disease, and a fractured vertebra that showed up after my first surgery. The disk they have operated 2 times (One is Aug then 2 months later in October) has no reputred. The disk at L3 L4 is buldging to the right, and then one at L5 S1 is buldging to the left and both are pressing on my satic nerves. My neurosurgeon says disk replacement isn't an option because I more then 1 disk that would need to be replaced. I was never in a car accident, the only thing I can think that might have caused this is we have carpeted stairs, and I was wearing socks and slipped down 2 stairs. I started getting pain in my legs about a 1 year later. Hope that helps :)

Answer:

Hi,

I guess I start getting the picture.

2 comments. A hernaited disc as such does not "guarantee", if I may put it like that, the presence of LBP (lower back pain). While myofascial problems almost invariably do so.

There are also considerations of severely imbalanced and plain weak muscular "corset" which unavoidably "delegates" its responsibilities "down the chain of command" to ligaments and/or tendons WHILE being in a severe [muscular] spasm.

This effectively cuts off all the supply of two key components to the spinal segment (mainly "disc" and "nerve root") - WATER and OXYGEN.

This kinda renders the above-mentioned pump mechanism non-functional and largely useless.

If this lasts for years (usually) in absence of ANY serious kinesiotherapy treatment aimed at correction of muscular development, strengthening and reinstating TROPHIC functions to the spinal segment I can assure You NO surgery would improve the status quo in the LB. As for degenerative disc disease. Being anatomically an avascular structure the disc DOES rely on the muscular pump to supply the above nutrients and basically gets DRIED out through the years of abuse.(I repeat myself on different forums so many times that it makes me think of writing an e-book on the subject ;-))

For that same reason the presence of disc BULGING!!!? would not be significantly compressing your sciatic. While serious trophic irregularities will almost ensure the above picture.

It gets trickier with fractures (what kind of fracture is that? location, location, location? is spondylolisthesis present, to what degree?). Get me the info so that I might consider the answer to the burning question "what exactly should I do to rid my wonderful self forever of this condition"

Question:

Dmitri, you seem to be good with medical terminology, so I will just write what my last MRI stated...

Straightening of lumbar lordosis is identified. Postsurgical changes are reidentified at L5-S1 level, right laminotomy of L5 is identified. Advanced degenerative disk space disease is seen at L3-L4, L4-L5, and L5-S1. At L3-L4, disk protrusion is noted, mildly narrowing. At L5-S1 postsurgical changes are noted within the disk annulus, ventral and right ventral lateral epidural fat. There is very mild enhancement of the ventral lateral epidural fat. Focal disk extrusion with caudal migration is identified. The extrusion reaches the mid S1 vertebral body level. There is peripheral enhancement of the small central extrusion. There is mild compression of the left S1 root in the lateral recess and facet hypertrophy moderately narrow right neural foramen.

Impression: Postsurgical changes at L5-S1 level as described. Please note that the labeling of the vertebral bodies is performed on base of segmentation and position of the conus at L1-L2 level assuming postsurgical change at L5-S1. Focal disk extrusion at L5-S1 level with caudal migration. Interval increases in the amount of extrusion since prior examination. Mild compression of the left S1 root in the lateral recess. Right foraminal disk protrusion at L5-S1 and facet hypertrophy at this level results in moderate right foraminal narrowing. Mild central canal narrowing throughout the lumbar spine due to multilevel disk protrusion and facet hypertrophy.

Maybe you would be able to explain this a little better to me.. All I know about the fracture is at the L3-L4 level. My surgeon really didn't explain much more, but I think it has something to do with the fact that before my 1st surgery I didn't have a fracture, but then during my 2nd surgery (which was only maybe 2 months later) they "found" a fracture. I did not fall or do anything that would have fractured it.

Answer:

Hi, your MRI description seems more or less in keeping with postsurgical changes and as such doesn't surprise me much. The fracture you are talking about is probably spondylolysis/spondylolisthesis. It is unclear what grade the spondylolisthesis is. In any case, if it is any less than the fifth there should be a careful examination done by an experienced kinesiologist and an individual program worked out and adhered to.

Surgery is not the solution to every problem the lower back might have. Unfortunately, it has become customary in the US more than anywhere else in the world to greatly expand indications for spinal surgery. Given the traumatic nature of this intervention, and the instability it leaves behind, it hardly serves the purpose of offering a better nutritional supply to the spine.

If the fracture is of any different nature it has to be understood before offering any advice.

Please try to be as specific as possible. It would help advice correctly.

The correct kinesiotherapy program would strengthen the muscles of all the lower back, and more importantly, would supply oxygen and water to your spine.

Bibliography:

1. *Treatment of acute low back pain in Wisconsin: results of the State Medical Society's Medical Outcomes Research Project.*
Reeser JC, Wiegmann SM, Hoover N, Oldridge N, Phillips D, Bjelland T, Scarpinato L, Treacy W, Helstad CP, Stoll J.
Department of Physical Medicine & Rehabilitation, Marshfield Clinic, USA.
2. *Asia Pac J Public Health. 2003;15(2):79-87.*
Low back pain in Australian adults: the economic burden.
Walker BF, Muller R, Grant WD.
School of Public Health and Tropical Medicine, James Cook University, Townsville, Queensland, Australia. spine@optusnet.com.au
3. *Joint Bone Spine 2002 Dec;69(6):589-96*
Computed tomography in low back pain and sciatica. A retrospective study of 132 patients in the Haute-Vienne district of France.
Hourcade S, Treves R.
4. *Is MRI useful for evaluation of acute low back pain?*
Grover F, Pereira SL.
University of Colorado Family Medicine Program, Denver, USA.
5. *Lumbalgia—how to proceed?*
Sturzenegger M.
Neurologische Universitätsklinik, Inselspital Bern.
6. *Clin Radiol 1983 May;34(3):321-4*
Radiographic examination of the lumbosacral spine: an 'age-stratified' study.
Brekkan A.
7. *Orthop Rev 1993 Jan;22(1):20-5*
Comment in: Orthop Rev. 1994 Jan;23(1):16.
Medical therapy of low back pain.
Borenstein D.
Spine Center, George Washington University Medical Center, Washington, DC.
8. *Low back pain.*
Frank A.
Northwick Park Hospital, Harrow.
9. *Assessment and management of acute low back pain.*
Bratton RL.
Mayo Clinic Jacksonville, Florida 32224, USA.

10. *Principles of Molecular Neurosurgery*
The Molecular Basis of Intervertebral Disc Degeneration
Leo B, Walker M, Anderson D
Freese A, Simeone FA, Leone P, Janson C (eds): *Principles of Molecular Neurosurgery*. Prog Neurol Surg. Basel, Karger, 2005, vol 18, pp 5-29 (DOI: 10.1159/000084407)
11. *Low back pain. Evaluation and management in the primary care setting.*
Rosomoff HL, Rosomoff RS.
University of Miami Comprehensive Pain and Rehabilitation Center, Florida, USA.
12. *Best Pract Res Clin Rheumatol 2002 Jan;16(1):23-30*
The economic burden of low back pain: a review of studies published between 1996 and 2001.
Maetzel A, Li L.
Arthritis and Autoimmunity Research Centre, Consultation and Rehabilitation Service, University Health Network, The Arthritis Society (Ontario Division), Toronto, Canada.
13. *Clin J Pain 1992 Sep;8(3):242-6*
Chronic back pain: view from a psychiatrist's office.
Stenger EM.
Pain Clinic, San Antonio, Texas 78212.
14. *Long-term effects of specific stabilizing exercises for first-episode low back pain.*
Hides JA, Jull GA, Richardson CA.
Department of Physiotherapy, Mater Misericordiae Public Hospitals, South Brisbane, Queensland, Australia.
15. *Managing musculoskeletal complaints with rehabilitation therapy: summary of the Philadelphia Panel evidence-based clinical practice guidelines on musculoskeletal rehabilitation interventions.*
Harris GR, Susman JL.
Kaiser Foundation Research Institute, Oakland, California, USA.
16. *Baillieres Clin Rheumatol 1992 Oct;6(3):705-30*
Prevention of low back pain: basic ergonomics in the workplace and the clinic.
Halpern M.
17. *Sports medicine approach to low back pain.*
Lively MW.
Department of Internal Medicine and Pediatrics, West Virginia University, Morgantown, USA.
18. *Wis Med J 1992 Oct;91(10):581-2*
Occupational low back pain: prevention of chronic disability.
Capasso CA.

19. *Disabil Rehabil* 2002 May 20;24(8):423-34
Management of back pain.
Quittan M.
Department of Physical Medicine and Rehabilitation, University Hospital Vienna,
20. *Training of back and neck in the year of 2002]*
Manniche C, Ostergaard K, Jordan A.
Syddansk Universitet, Institut for Idræt og Biomekanik, og H:S Rigshospitalet, RHIMA-centret, slidgigtslaboratoriet, institut for inflammationsforskning, Rygcenter Fyn, Ringe.
21. *[Physiotherapy in low back pain—indications and limits]*
[Article in German]
Seeger D.
22. *Epidural lysis of adhesions and myelography.*
Manchikanti L, Singh V.
Pain Management Center of Padu
23. Volinn E. *The epidemiology of low back pain in the rest of the world. A review of surveys in low- and middle-income countries. Spine.* 1997 Aug 1;22(15):1747-54.
24. *I: Zentralbl Neurochir.* 2000;61(1):22-5.
[Epidemiology of disk surgery in Germany]
[Article in German]
Kast E, Antoniadis G, Richter HP.
25. *Center for Cost and Outcome Research University of Washington*
(<http://depts.washington.edu/ccor/studies/SpineSurgEpi.shtml>)
Epidemiology of Spinal Surgery: Rates and Trends
26. *Medical versus Surgical Treatment for Low Back Pain: Evidence and Clinical Practice*
Effective Clinical Practice, September/October 1999.
Nancy J.o. Birkmeyer, James N. Weinstein
27. *Spinal-Fusion Surgery — The Case for Restraint*
Richard A. Deyo, M.D., M.P.H., Alf Nachemson, M.D., Ph.D., and Sohail K. Mirza, M.D.
28. *1997 Volvo Award winner in basic science studies. Immunohistologic markers for age-related changes of human lumbar intervertebral discs.*
Nerlich AG, Schleicher ED, Boos N.
Institute of Pathology, Ludwig-Maximilians-University Munich, Germany.
29. *Boos N and Nerlich AG, Blood vessels in human lumbar intervertebral discs: An immunohistochemical study, presented at the annual meeting of the International Society for the Study of the Lumbar Spine, Cleveland, 2002;*

30. *Baillieres Clin Rheumatol.* 1998 Feb;12(1):115-39. Related Articles,
What help and what confusion can imaging provide?
Boos N, Hodler J.
Orthopaedic University Hospital Balgrist, Zurich, Switzerland.
31. Boos N et al., *Classification of age-related changes in lumbar intervertebral discs, presented at the annual meeting of the International Society for the Study of the Lumbar Spine, Cleveland, 2002; Spine, 2002*
32. *Rapid atrophy of the lumbar multifidus follows experimental disc or nerve root injury.*
Hodges P, Holm AK, Hansson T, Holm S.
Department of Physiotherapy, School of Health and Rehabilitation Sciences, The University of Queensland, Brisbane Qld 4072 Australia. p.hodges@uq.edu.au
33. *Spine.* 2006 Nov 1;31(23):2707-14.
United States' trends and regional variations in lumbar spine surgery: 1992-2003.
Weinstein JN, Lurie JD, Olson PR, Bronner KK, Fisher ES.
Department of Orthopaedics, Dartmouth Medical School, Hanover, NH 03756, USA.
tamara.s.morgan@dartmouth.edu
34. *Continued disability and pain after lumbar disc surgery: the role of cognitive-behavioral factors.*
Pain. 2006; 123(1-2):45-52 (ISSN: 1872-6623)
den Boer JJ; Oostendorp RA; Beems T; Munneke M; Evers AW
Department of Physical Therapy, University Radboud Nijmegen Medical Centre, The Netherlands.
J.denBoer@fysio.umcn.nl
35. Zharkov P.L., Zharkov A.P., Bubnovski S.M.
"Lower Back" Pain [A book in Russian]
ISBN 5-901254-05-08 Moscow 2001
36. Zharkov P.L.
Osteochondrosis and other dystrophic changes of the spine in adults and children. [A book in Russian]
ISBN 5-225-01067-9, Moscow 1994